Memo

To: Dick from: Ron

Subject: March 6th Telephone Conversation with BJ Miller

BJ and a group of water user biologists are working on operational procedures that would set export curtailments that provide more environmental protection and operational flexibility for the water users. The group has to report to the water users policy group on March 31rd.

Biologist on the group are:

Chuck Hanson Randy Bailey Jim Buell Pete Rhoads Serge Birk Joe ? MWD

As part of their efforts they are trying to determine the historical, present, and future mortality at the south Delta pumps. They have separated direct and indirect mortality.

Direct:(Banks and Tracy)
Pre-screen predation
Entrainment
Salvage
Post release predation

Indirect:

Interference with migration (They have found no data to support this)

Species of interest:

Salmon (all four runs) Steelhead Delta smelt Splittail Striped Bass

Looking at all daily salvage data at the pumps for all eight species since 1979, they are trying to come up with adult equivalent of lose for each species. Variables are number, length and distribution. Sheila Greene DWR is providing the data base. Trying to correlate day of year with length by species. Hoping to develop an equation that gives adult equivalent mortality at the pumps given day of year, type, and length.

They are also trying to determine an abundance estimate for all eight species. Then they would have a Adult Estimated Mortality/Abundance ratio for each specie for each month.

They are determining what the ratio would have been in the past and what it should be in the future.

There would also be a threshold developed for each species that would specify the numbers of each species that could be taken each month. If the operators stays under that number they could pump all the water they want (so to speak).

Exporters could obtain credits by funding actions to reduce mortality (such as screening, etc.).

BJ ask if the Diversion Effects on Fisheries team would be interested in their data base. I said yes, since our team is reviewing the impacts on the same species. We should get it electronically next week.